

## MEMORANDUM

To: Social Security Advisory Board  
Subject: SDM Data Analysis Summary  
Date: April 24, 2015

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Note: Link for OIG report: <http://oig.ssa.gov/sites/default/files/audit/full/pdf/A-01-12-11218.pdf>  
OPQ reports: Studies were obtained from SSA's intranet – please contact Hong Han for copy of PDF

# OIG Report- Single Decision Maker Model- Authority to Make Certain Disability Determinations without a Medical Consultant's Signature

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## Background

In SSA's disability programs, the Single Decision Maker (SDM) model authorizes disability examiners to make certain initial determinations without requiring a medical or psychological consultant's (MC) signature. In 1999, SSA started the SDM pilot in 10 disability determination services (DDS) sites—referred to as SDM prototype<sup>1</sup>. Later in 1999, SSA expanded the pilot to an additional 10 DDS sites—referred to as SDM II<sup>2</sup>. Therefore, 20 DDSs participated in the SDM pilot, and still do today. The remaining 34 DDSs and Federal units do not have SDM authority.

## Results: DDS Processing Times

OIG found that SDM sites processed cases sooner than Non-SDM sites:

- back disorder cases, on average, were processed 26 days sooner than at Non-SDM sites;
- genito-urinary cases, on average, were processed 11 days sooner than at Non-SDM sites;
- back disorder cases without an MC signature, on average, were processed 38 days sooner than at Non-SDM site cases with an MC signature; and
- genito-urinary cases without an MC signature, on average, were processed 22 days sooner than at Non-SDM site cases with an MC signature.

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<sup>1</sup> The 10 SDM prototype sites include DDSs in Alabama, Alaska, California (Los Angeles North and West), Colorado, Louisiana, Michigan, Missouri, New Hampshire, New York, and Pennsylvania.

<sup>2</sup> The 10 SDM II sites include DDSs in Florida, Guam, Kansas, Kentucky, Maine, Nevada, North Carolina, Vermont, Washington, and West Virginia.

## SDM Sites' Quality

In FY 2011, the Quality Assurance (QA) Net Accuracy rates for the SDM sites ranged from 95.4 percent to 99.2 percent – with most at 97 percent or higher, compared to the 97.6-percent national accuracy rate, ranging from 95.2 percent to 99.2 percent. Also in FY 2011, the Pre-effectuation Review (PER) return rates for the SDM sites ranged from 1.4 percent to 3.9 percent, compared to the national PER return rate of 2.7 percent, ranging from 1.4 percent to 6.5 percent.

## Program Savings

SSA's Office of the Chief Actuary estimated significant savings to the OASDI Trust Fund and General Revenues with the gradual termination of the SDM pilot. According to the Office of Quality Performance's 2010 report, expanding the SDM model in its present form nationwide would increase overall disability allowance rates by 0.61 percent. In addition, the results of OIG sample case reviews showed the overall allowance rates through the Appeals Council level may be higher in SDM prototype sites.

## Weaknesses of OIG Report

OIG conducted a limited study of the SDM model by only looking at two specific impairments: back disorder and genito-urinary. The sample size of the OIG study is small, and small sample size may have detrimental and profound effects on the outcomes. Also, the OIG report did not analyze accuracy empirically; rather, it relied on anecdotal evidence by noting that SDM pilot sites, as well as organizations that represent DDS employees, *reported* that SDM authority maintained or improved case quality.

## Analytical Approach and Methods

From each group of initial claimants, OIG identified 3 populations (SDM prototype, SDM II, and Non-SDM sites) and randomly sampled 1,100 out of 297,662 back disorder cases and 200 out of 29,586 genito-urinary cases from each population to review in Calendar Year 2011. In total, they reviewed 3,900 cases. They removed all Title XVI child cases from each population and replaced them with 47 back disorder and 214 genito-urinary cases, because these cases require a MC's signature. They calculated the average sample case initial processing time by site, calculated appeal rates through the Appeals Council (AC) level, and calculated allowance rates inclusive of the initial, reconsideration and hearing levels.

# Office of Quality Performance (OQP)-Estimating the Effects of National Implementation of Single Decision Maker

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## Background

In 2010 and 2013, the Office of Quality Performance (OQP) conducted SDM modeling studies. The purpose of these studies was to develop a series of statistical models to isolate and measure the impacts of Original Authority (OA) SDM on initial DDS allowance rates, overall disability program allowance rates, case processing time, and case accuracy.

## Results

In the more recent 2013 study, OQP estimated that the SDM authority, if implemented nationwide, would increase overall DI allowance rates by 0.89% and increase SSI allowance rates by 0.87%. This increase would equate to roughly an additional 14,000 DI and 4,000 SSI net program allowances per year. These results are similar, though somewhat higher than the results of the 2010 OQP SDM study, which found that extending SDM to the rest of the nation would increase overall DI program allowance rates by 0.61% and overall SSI program allowance rates by 0.13%. For New Authority (NA<sup>3</sup>) SDM, the OQP statistical models and simulations suggested that the use of SDM authority for QDD<sup>4</sup>/CAL<sup>5</sup> cases increased overall initial disability allowance rates by less than 0.01%, or only about 250 additional cases per year.

In addition, nationwide implementation of SDM authority would decrease overall DDS processing time by about 11.3 days overall, including a decrease of 10.9 days for DI cases, 12.9 days for adult SSI cases, and 3.1 days for QDD/CAL cases. Finally, the presence of SDM appears to have no statistically significant impact on either DDS decisional accuracy or overall case deficiency – suggesting that the small increase in initial allowance rates due to SDM reflect correct and appropriate adjudicative decisions. The results for the OA SDM cases are similar to those results found in the 2010 OQP SDM modeling study.

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<sup>3</sup> New Authority (NA) SDM, also referred to as a Disability Examiner (DE) authority, was extended for Quick Disability Determinations (QDD) and Compassionate Allowance (CAL) cases to all DDS sites beginning in November 2010.

<sup>4</sup> Quick Disability Determination (QDD) cases are initial Electronic Disability Collect System (EDCS) cases that are electronically-identified as having a high potential that the claimant is disabled, evidence of the claimant's allegations can be easily and quickly obtained, and the case can be processed quickly in the Disability Determination Services (DDS). Initially a part of the Disability Service Improvement (DSI) initiative only, QDD was implemented nationwide beginning in October 2007 and the initial roll-out was completed in February 2008.

<sup>5</sup> The Compassionate Allowances (CAL) initiative was launched in October 2008 and is designed to quickly allow cases involving certain medical conditions that are so severe that claimants would invariably qualify under the Listing of Impairments based on existing medical information.

## Improvements in More Recent Study

In the 2013 study, QDD/CAL is separate and distinct from SDM authority in Prototype States and SDM II States, and NA allows experienced DEs to make fully favorable determinations in certain QDD/CAL cases without signoff from a MC. Moreover, SSA established standards for consistent and reliable coding of the SDM indicator flag in the electronic data. See table below for a comparison between Prototype/SDM II Authority and New Authority for QDD/CAL cases.

<b>Prototype/SDM II Authority</b>	<b>New Authority for QDD/CAL</b>
Sites do not process reconsideration cases	Will apply to CAL reconsideration cases
Applies to denials and less than fully favorable determinations in certain situations	Applies only to fully favorable determinations
Mentions determinations “after appropriate consultation with MC/PC”	Requires an MC/PC opinion when processing ‘equals listing’ determinations

## Analytical Approach and Methods

The SDM models were estimated using analytical approach and programming language (the Statistical Analysis System, or SAS). OPQ applied standard statistical modeling approaches (logistic and linear regression) to develop three sets of SDM models<sup>6</sup> separately for SDM NA and SDM OA cases. The DDS Decisional and Accuracy models were estimated used a logistic regression approach for dichotomous dependent variables. For the DDS Decisional model, separate models were estimated for the Title II or DI population, for the Title XVI or SSI population and for the QDD/CAL population. For the DDS Processing Time models, separate DI and SSI models were also estimated; but for this model, a generalized linear model<sup>7</sup> estimation approach was used.

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<sup>6</sup> The three sets of SDM models are DDS Decision Models, DDS Processing Time Models, and DDS Accuracy Models.

<sup>7</sup> The Generalized Linear Modeling or GLM approach is the standard modeling approach used when the dependent variable is continuous. For details, see Peter P. McCullagh see Generalized Linear Models, CRC Press, LLC, Chicago Illinois, second edition, 1999.